

IN THE CLAIMS:

Please amend the claims as follows. This listing of the claims will replace all prior versions, and listings, of claims in the application:

- 1-9 (canceled)
10. (Previously Presented) A refrigeration device, comprising:
a thermally insulating housing;
said thermally insulating housing enclosing an inner chamber and an evaporator arranged in said housing separated from said inner chamber;
said evaporator including a surface where an ice layer forms during operation;
a pair of temperature sensors placed in the vicinity of said evaporator such that for a given thickness of said ice layer only one of said temperature sensors is embedded in said ice layer;
a heating device for heating said evaporator;
a monitoring circuit connected to said pair of temperature sensors; and
said monitoring circuit determines the difference (ΔT) between the temperature values detected by said pair of temperature sensors and activates said heating device when said temperature difference exceeds a predetermined value (ΔT_{\max}).
11. (Previously Presented) The refrigeration device according to claim 10, wherein a first one of said temperature sensors is arranged directly on said surface of said evaporator and a second one of said temperature sensors is arranged at a distance from said surface.
12. (Previously Presented) The refrigeration device according to claim 11, including a channel communicating with said inner chamber, wherein said evaporator is arranged in said channel.

13. (Previously Presented) The refrigeration device according to claim 12, wherein said second one of said temperature sensors is arranged on an output of said channel terminating in said inner chamber.
14. (Previously Presented) The refrigeration device according to claim 11, wherein said evaporator is arranged in said housing separated from said inner chamber by an insulating partition having at least one channel communicating with said inner chamber through said partition, and wherein said evaporator communicates with said inner chamber through said channel.
15. (Previously Presented) The refrigeration device according to claim 14, wherein said second one of said temperature sensors is arranged on an output of said channel terminating in said inner chamber.
16. (Previously Presented) A refrigeration device comprising:
 - a thermally insulating housing;
 - said thermally insulating housing enclosing an inner chamber and an evaporator arranged in said housing separated from said inner chamber;
 - said evaporator including a surface where an ice layer forms during operation;
 - a pair of temperature sensors placed in the vicinity of said evaporator such that for a given thickness of said ice layer only one of said temperature sensors is embedded in said ice layer;
 - a carrier attached to said evaporator surface, wherein a first one of said temperature sensors is arranged directly on said carrier adjacent said surface of said evaporator and said second one of said temperature sensors is arranged on said carrier at a distance from said first one of said temperature sensors and said surface;
 - a heating device for heating said evaporator;
 - a monitoring circuit connected to said pair of temperature sensors; and

said monitoring circuit determines the difference (ΔT) between the temperature values detected by said pair of temperature sensors and activates said heating device when said temperature difference exceeds a predetermined value (ΔT_{\max}).

17. (Previously Presented) An operating method for a refrigeration device, including a thermally insulating housing;

said thermally insulating housing enclosing an inner chamber and an evaporator arranged in said housing separated from said inner chamber;

said evaporator including a surface where an ice layer forms during operation;

a pair of temperature sensors positioned such that for a given thickness of said ice layer only one of said temperature sensors is embedded in said ice layer;

a heating device for heating said evaporator;

a monitoring circuit connected to said pair of temperature sensors;

said monitoring circuit determining the difference (ΔT) between the temperature values detected by said pair of temperature sensors;

the method including the steps of:

a) positioning the pair of temperature sensors in the vicinity of said evaporator;

b) detecting a difference (ΔT) between temperature values detected by said pair of temperature sensors; and

c) deciding that a defrosting procedure is necessary, if the difference (ΔT) exceeds a limit value (ΔT_{\max}).

18. (Previously Presented) The method according to claim 17, wherein said steps b) and c) are in each case performed after a preset delay after said evaporator is started up.

19. (Previously Presented) The method according to claim 18, wherein said steps b) and c) are performed if the speed of change of the temperature on at least one of both sensors has fallen below a predetermined limit value.
20. (Previously Presented) The method according to claim 17, wherein said evaporator is heated when it has been decided that a defrosting procedure is necessary.
21. (Previously Presented) The method according to claim 17, including said monitoring circuit detecting said temperature difference and deciding that said defrosting procedure is necessary.
22. (Previously Presented) The method according to claim 21, including said monitoring circuit activating said heating device when said temperature difference exceeds a predetermined value (ΔT_{\max}).
23. (Previously Presented) The refrigeration device according to claim 11, wherein said second one of said temperature sensors is disposed adjacent a ventilator positioned between said evaporator and said inner chamber.
24. (Previously Presented) The refrigeration device according to claim 10, wherein neither of said temperature sensors is disposed in said inner chamber.
25. (Previously Presented) The method according to claim 17, wherein step a) is practiced by positioning a first one of said temperature sensors directly on said surface of said evaporator and positioning a second one of said temperature sensors adjacent a ventilator positioned between said evaporator and said inner chamber.

26. (New) A refrigeration device comprising:
- a thermally insulating housing including an inner chamber for receiving refrigerated goods and an evaporator chamber separated from the inner chamber by a partition, the partition including openings defining a cooling channel between the evaporator chamber and the inner chamber;
 - an evaporator disposed in the evaporator chamber, said evaporator including a surface where an ice layer forms during operation;
 - a first temperature sensor attached directly to said surface of the evaporator;
 - a second temperature sensor disposed in one of the openings in the partition between the evaporator chamber and the inner chamber such that the second temperature sensor is not disposed in either the evaporator chamber or the inner chamber;
 - a heating device for heating said evaporator; and
 - a monitoring circuit connected to said first and second temperature sensors and communicating with said heating device, wherein said monitoring circuit is programmed to determine the difference (ΔT) between the temperature values detected by the first and second temperature sensors and to activate said heating device when the temperature difference exceeds a predetermined value (ΔT_{max}).